

FILEID**BASCTRLO

BBBBBBBB	AAAAAA	SSSSSSS	CCCCCCC	TTTTTTT	RRRRRRR	LL	000000				
BBBBBBBB	AAAAAA	SSSSSSS	CCCCCCC	TTTTTTT	RRRRRRR	LL	000000				
BB	BB	AA	AA	SS	CC	TT	RR	RR	LL	00	00
BB	BB	AA	AA	SS	CC	TT	RR	RR	LL	00	00
BB	BB	AA	AA	SS	CC	TT	RR	RR	LL	00	00
BB	BB	AA	AA	SS	CC	TT	RR	RR	LL	00	00
BBBBBBBB	AA	AA	SSSSSS	CC	TT	RRRRRRR	LL	00	00		
BBB BBBB	AA	AA	SSSSSS	CC	TT	RRRRRRR	LL	00	00		
BB	BB	AAAAAAA	SS	CC	TT	RR	RR	LL	00	00	
BB	BB	AAAAAAA	SS	CC	TT	RR	RR	LL	00	00	
BB	BB	AA	AA	SS	CC	TT	RR	RR	LL	00	00
BB	BB	AA	AA	SS	CC	TT	RR	RR	LL	00	00
BBBBBBBB	AA	AA	SSSSSSS	CCCCCCC	TT	RR	RR	LLLLLLL	000000	000000	
BBBBBBBB	AA	AA	SSSSSSS	CCCCCCC	TT	RR	RR	LLLLLLL	000000	000000	

LL		SSSSSSS
LL		SSSSSSS
LL		SS
LL		SS
LL		SS
LL		SSSSSS
LL		SSSSSS
LL		SS
LL		SS
LL		SS
LL		SSSSSSS
LL		SSSSSSS

```
1 0001 0 MODULE BASCTRL0 {
2 0002 0           IDENT = '1-004'
3 0003 0           } =
4 0004 1 BEGIN
5 0005 1
6 0006 1 ****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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25 0025 1 *
26 0026 1 *
27 0027 1 ****
28 0028 1 !
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: VAX-11 BASIC Miscellaneous I/O
32 0032 1
33 0033 1 ABSTRACT:
34 0034 1
35 0035 1 This module contains the BASIC CTRLO and RCTRLO functions,
36 0036 1 Which suppress and unsuppress output on a specified channel.
37 0037 1
38 0038 1 ENVIRONMENT: VAX-11 User Mode
39 0039 1
40 0040 1 AUTHOR: John Sauter, CREATION DATE: 19-APR-1979
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original.
45 0045 1 1-002 - Set up ISBSA-USER FP. JBS 25-JUL-1979
46 0046 1 1-003 - Correct test of LOBSV OPENED. JBS 26-FEB-1980
47 0047 1 1-004 - Set CCO bit on the output side of channel 0. JBS 31-MAR-1980
48 0048 1 --
49 0049 1
50 0050 1 !<BLF/PAGE>
```

```
52      0051 1 | SWITCHES:  
53      0052 1 |  
54      0053 1 |  
55      0054 1 |  
56      0055 1 | SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);  
57      0056 1 |  
58      0057 1 |  
59      0058 1 | LINKAGES:  
60      0059 1 |  
61      0060 1 |  
62      0061 1 | REQUIRE 'RTLIN:OTSLNK';           ! Define linkages  
63      0490 1 |  
64      0491 1 |  
65      0492 1 | TABLE OF CONTENTS:  
66      0493 1 |  
67      0494 1 |  
68      0495 1 | FORWARD ROUTINE  
69      0496 1 |     BASSCTRLD,  
70      0497 1 |     BASSRCTRLD;  
71      0498 1 |           ! Suppress output  
72      0499 1 |           ! Cease suppressing output  
73      0500 1 | INCLUDE FILES:  
74      0501 1 |  
75      0502 1 |  
76      0503 1 | REQUIRE 'RTLML:OTSLUB';          ! Get LUB definitions  
77      0643 1 |  
78      0644 1 | REQUIRE 'RTLML:OTESISB';        ! Get ISB definitions  
79      0812 1 |  
80      0813 1 | REQUIRE 'RTLIN:RTLPSECT';       ! Macros for defining psects  
81      0908 1 |  
82      0909 1 | LIBRARY 'RTLSTARLE';         ! System symbols  
83      0910 1 |  
84      0911 1 |  
85      0912 1 | MACROS:  
86      0913 1 |  
87      0914 1 |     NONE  
88      0915 1 |  
89      0916 1 | EQUATED SYMBOLS:  
90      0917 1 |  
91      0918 1 |     NONE  
92      0919 1 |  
93      0920 1 | PSECTS:  
94      0921 1 |  
95      0922 1 | DECLARE_PSECTS (BAS);        ! Declare psects for BASS facility  
96      0923 1 |  
97      0924 1 | OWN STORAGE:  
98      0925 1 |  
99      0926 1 |     NONE  
100     0927 1 |  
101     0928 1 | EXTERNAL REFERENCES:  
102     0929 1 |  
103     0930 1 |  
104     0931 1 | EXTERNAL ROUTINE  
105     0932 1 |     BASS$OPEN ZERO : NOVALUE,          ! Open channel zero  
106     0933 1 |     BASS$CB_PUSH : JSB CB PUSH NOVALUE,    ! Load register CCB  
107     0934 1 |     BASS$CB_POP : JSB CB POP NOVALUE,     ! Done with register CCB  
108     0935 1 |     BASS$$STOP_10 : NOVALUE;                  ! Signal fatal I/O error
```

```
: 109      0936 1
.: 110      0937 1
.: 111      0938 1  |+
.: 112      0939 1  |- The following are the error codes used in this module.
.: 113      0940 1
.: 114      0941 1  EXTERNAL LITERAL
.: 115      0942 1  BAS$K_IO_CHANOT : UNSIGNED (8);      ! Channel not open.
.: 116      0943 1
```

```
118      0944 1 GLOBAL ROUTINE BASSCTRL0 (
119          0945 1   CHAN
120              0946 1   ) =
121
122      0948 1   ++
123      0949 1   FUNCTIONAL DESCRIPTION:
124
125          0951 1     Simulates typing a control O on the terminal open on the
126          0952 1     specified channel.
127
128      0954 1   FORMAL PARAMETERS:
129
130          0956 1     CHAN.rl.v      The channel whose terminal to simulate a
131          0957 1     control O on
132
133      0959 1   IMPLICIT INPUTS:
134
135          0961 1     NONE
136
137      0963 1   IMPLICIT OUTPUTS:
138
139          0965 1     LUB$V_CCO      Cancel control O.
140
141      0967 1   ROUTINE VALUE:
142
143      0968 1   COMPLETION CODES:
144
145          0969 1     SSS_NORMAL
146
147          0970 1   SIDE EFFECTS:
148
149          0974 1     Signals if an error is encountered.
150          0975 1     BAS$SCB_PUSH will signal if the channel number is invalid.
151          0976 1     This function is a no-operation if the channel is not open.
152
153          0978 1   --
154          0979 1
155          0980 2   BEGIN
156          0981 2
157          0982 2   BUILTIN
158          0983 2   FP;
159          0984 2
160          0985 2   GLOBAL REGISTER
161          0986 2   CCB = K_CCB_REG : REF BLOCK [, BYTE];
162          0987 2
163          0988 2   LOCAL
164          0989 2   FMP : REF BLOCK [, BYTE];
165          0990 2
166          0991 2   FMP = .FP;
167          0992 2
168          0993 2   Get the CCB for the channel.
169          0994 2
170          0995 2
171          0996 2   IF (.CHAN EQL 0)
172          0997 2   THEN
173          0998 2   BEGIN
174          0999 2
175          1000 3   ! The user is referencing his controlling terminal.
```

```

175      1001      :-      BAS$$CB_PUSH (.LUB$K_LUN_BPRI, LUB$K_ILUN_MIN);
176      1002      CCB [ISBSA_USER_FP] = .FMP [SF$L_SAVE_FP];
177      1003
178      1004      + If the controlling terminal is not yet open, open it.
179      1005      IF ( NOT .CCB [LUB$V_OPENED]) THEN BAS$OPEN_ZERO (.FMP [SF$L_SAVE_FP]);
180      1006
181      1007
182      1008      ELSE END
183      1009
184      1010      ELSE BEGIN
185      1011      This is an ordinary channel.
186      1012      BAS$$CB_PUSH (.CHAN, LUB$K_LUN_MIN);
187      1013      CCB [ISBSA_USER_FP] = .FMP [SF$L_SAVE_FP];
188      1014      END;
189      1015
190      1016
191      1017
192      1018
193      1019
194      1020      + If the channel is not now open, this function is a no-operation.
195      1021
196      1022
197      1023
198      1024      IF (.CCB [LUB$V_OPENED])
199      1025      THEN BEGIN
200      1026      Now clear the CCO bit, so control O's will not be canceled.
201      1027      CCB [LUB$V_CCO] = 0;
202      1028      END;
203      1029
204      1030      + We are done with register CCB.
205      1031      BAS$$CB_POP ();
206      1032      RETURN TSS$_NORMAL;
207      1033      END;                                ! end of BAS$CTRL0
208      1034
209      1035
210      1036
211      1037
212      1038
    
```

```

.TITLE BAS$CTRL0
.IDENT \1-004\

.EXTRN BAS$OPEN_ZERO, BAS$CB_PUSH
.EXTRN BAS$CB_POP, BAS$STOP_TO
.EXTRN BAS$K_IO_CHANOT

.PSECT _BASSCODE,NOWRT, SHR, PIC.2

      081C 00000
54 0000000G 00 9E 00002      .ENTRY BAS$CTRL0, Save R2,R3,R4,R11
53           5D D0 00009      MOVAB BAS$CB_PUSH, R4
          04 AC D5 0000C      MOVL FP, FMP
          1E 12 0000F      TSTL CHAN
          08 CE 00011      BNEQ 1S
50           08 CE 00014      MNEGL #8, R0
52           08 CE 00014      MNEGL #8, R2
          64 16 00017      JSB  BAS$CB_PUSH
    
```

: 0944
 : 0991
 : 0996
 : 1002

FF4C	CB	0C	A3	DD	00019		MOVL	12(FMP), -180(CCB)	: 1003
	1E	FC	AB	E8	0001F		BLBS	-4(CCB), 3\$: 1008
00000000G	00	0C	A3	DD	00023		PUSHL	12(FMP)	
		01	FB	00026			CALLS	#1, BAS\$OPEN_ZERO	
		OE	11	0002D		1\$:	BRB	2\$	
	52	04	AC	DD	00031		CLRL	R0	
			64	16	00035		MOVL	CHAN, R2	
FF4C	CB	0C	A3	DD	00037	2\$:	JSB	BAS\$CB_PUSH	: 1017
	04	FC	AB	E9	0003D	3\$:	MOVL	12(FMP), -180(CCB)	: 1024
A0	AB	04	8A	00041	3\$:	4\$::	BLBC	-4(CCB), 4\$	
		00000000G	00	16	00045	4\$::	BICB2	#4, -96(CCB)	
	50		01	DD	0004B		JSB	BAS\$CB_POP	
					04	0004E	RET	#1, R0	

: Routine Size: 79 bytes, Routine Base: _BAS\$CODE + 0000

: 213 1039 1

```
1040 1 GLOBAL ROUTINE BASS$CTRLO (
1041 1     CHAN
1042 1     ) =
1043 1
1044 1 ++ FUNCTIONAL DESCRIPTION:
1045 1 Cancels control 0 on the terminal open on the specified channel.
1046 1
1047 1 FORMAL PARAMETERS:
1048 1     CHAN.rl.v      The channel whose terminal to disable CTRLOing on
1049 1
1050 1 IMPLICIT INPUTS:
1051 1     NONE
1052 1
1053 1 IMPLICIT OUTPUTS:
1054 1     LUB$V_CCO which, when set, cancels control 0.
1055 1
1056 1 ROUTINE VALUE:
1057 1 COMPLETION CODES:
1058 1     SSS_NORMAL
1059 1
1060 1 SIDE EFFECTS:
1061 1     Signals if an error is encountered.
1062 1     BAS$SCB_PUSH will signal if the channel number is invalid.
1063 1     This routine is a no-operation if the channel is not open.
1064 1
1065 1
1066 1
1067 1
1068 1
1069 1
1070 1
1071 1
1072 1 --+
1073 1
1074 2 BEGIN
1075 2
1076 2 BUILTIN
1077 2     FP;
1078 2
1079 2 GLOBAL REGISTER
1080 2     CCB = K_CCB_REG : REF BLOCK [, BYTE];
1081 2
1082 2 LOCAL
1083 2     FMP : REF BLOCK [, BYTE];
1084 2
1085 2     FMP = .FP;
1086 2
1087 2 + Get the CCB for the channel.
1088 2 -
1089 2
1090 2 IF (.CHAN EQ 0)
1091 2 THEN
1092 2 BEGIN
1093 2
1094 2 + The user is referencing his controlling terminal.
1095 2 -
1096 2     BAS$SCB_PUSH (LUB$K_LUN_BPRI, LUB$K_ILUN_MIN);
```

```

272      1097      CCB [ISBSA_USER_FP] = .FMP [SF$L_SAVE_FP];
273      1098      +
274      1099      | If the controlling terminal is not yet open, open it.
275      1100      |
276      1101      |
277      1102      IF ( NOT .CCB [LUBSV_OPENED] ) THEN BASSOPEN_ZERO (.FMP [SF$L_SAVE_FP]);
278      1103      |
279      1104      ELSE END
280      1105      |
281      1106      BEGIN
282      1107      |
283      1108      | This is an ordinary channel.
284      1109      |
285      1110      BASS$CB PUSH (.CHAN, LUB$K_LUN_MIN);
286      1111      CCB [ISBSA_USER_FP] = .FMP-[SF$L_SAVE_FP];
287      1112      END;
288      1113      |
289      1114      |
290      1115      | If the channel is not now open, this function is a no-operation.
291      1116      |
292      1117      |
293      1118      IF (.CCB [LUBSV_OPENED])
294      1119      THEN
295      1120      BEGIN
296      1121      |
297      1122      | Now set the CCO bit, which will cause the record level code
298      1123      | to tell RMS to cancel control 0.
299      1124      |
300      1125      CCB [LUBSV_CCO] = 1;
301      1126      END;
302      1127      |
303      1128      |
304      1129      | We are done with register CCB.
305      1130      |
306      1131      BAS$SCB_POP ();
307      1132      RETURN ?SSS_NORMAL;
308      1133      END;                                ! end of BASSRCTRL0

```

				.ENTRY	BASSRCTRL0, Save R2,R3,R4,R11	: 1040	
				MOVAB	BASS\$CB_PUSH, R4	: 1085	
			54 0000000G	00 9E 00002	MOVL	FP, FMP	: 1090
			53	5D D0 00009	TSTL	CHAN	: 1096
				04 AC D5 0000C	BNEQ	1\$	
				1E 12 0000F	MNEGGL	#8, R0	
			50	08 CE 00011	MNEGGL	#8, R2	
			52	08 CE 00014	JSB	BASS\$CB_PUSH	
				64 16 00017	MOVL	12(FMP), -180(CCB)	
			FF4C CB 0C A3 DD 00019		BLBS	-4(CCB), 3\$	
			1E FC AB E8 0001F		PUSHL	12(FMP)	
			0000000G 00 0C A3 DD 00023		CALLS	#1, BASSOPEN_ZERO	
				01 FB 00026	BRB	2\$	
				0E 11 0002D	CLRL	R0	
				50 D4 0002F 1\$: 04 AC DO 00031	MOVL	CHAN, R2	

BASSCTRL0
1-004

L 12
16-Sep-1984 00:10:22 VAX-11 Bliss-32 v4.0-742
14-Sep-1984 11:54:48 [BASRTL.SRC]BASCTRL0.B32;1

Page 9
(4)

FF4C	CB	OC	A3	64	16	00035	JSB	BASS\$CB_PUSH
04			AB	D0	00037		12(FMP)	-180(CCB)
A0	AB	FC		E9	0003D	2\$:	MOVL	-4(CCB), 4\$
			04	88	00041	3\$:	BLBC	#4, -96(CCB)
			50	00000000G	00	16	BISB2	BA\$SCB_POP
				01	D0	00045	4\$:	JSB
					04	0004B	MOVL	#1, R0
						0004E	RET	

: 1111
: 1118
: 1125
: 1131
: 1132
: 1133

; Routine Size: 79 bytes, Routine Base: _BASS\$CODE + 004F

; 309 1134 1
; 310 1135 1 END
; 311 1136 1
; 312 1137 0 ELUDOM

; ! end of module BAS\$CTRL0

PSECT SUMMARY

Name	Bytes	Attributes
_BASS\$CODE	158	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
\$_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	2	0	581	00:01.1

COMMAND QUALIFIERS

; BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LISS:BASCTRL0/OBJ=OBJ\$:BASCTRL0 MSRC\$:BASCTRL0/UPDATE=(ENH\$:BASCTRL0)

; Size: 158 code + 0 data bytes
; Run Time: 00:10.0
; Elapsed Time: 00:24.3
; Lines/CPU Min: 6828
; Lexemes/CPU-Min: 40438
; Memory Used: 117 pages
; Compilation Complete

0020 AH-BT13A-SE
VAX/VMS V4.0

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